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By: Susan M. Foley



PATENT  
Attorney Docket No.: 080129-000100US

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re the application of:

JEREMY S. LEE et al.

Application No.: 10/061,979 ✓

Filed: January 31, 2002

For: BIOLOGICALLY ACTIVE  
METAL-CONTAINING NUCLEIC  
ACIDS

Examiner: Unassigned

Art Unit: Unassigned

**SUPPLEMENTAL INFORMATION  
DISCLOSURE STATEMENT**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

Applicants direct the Examiner's attention to the references below, also listed on the accompanying Form PTO-1449. A copy of each is also enclosed.

The following U.S. Patents are set forth below by issue date:

BJ. U.S. Patent 5,532,129 issued July 2, 1996 to Heller.

BK. U.S. Patent 5,589,692 issued December 31, 1996 to Reed.

The following international patent publications are set forth by publication date:

BL. PCT Publication No. WO 95/15971 published on June 15, 1995.

BM. PCT Publication No. WO 96/40712 published on December 19, 1996.

BN. PCT Publication No. WO 97/46568 published on December 11, 1997.

BO. PCT Publication No. WO 99/31115 published on June 24, 1999.

The following articles are set forth by the indicated year of publication date:

BP. Bandekar et al., "Copper (II) Nucleic Acid Interactions - a Conformational Study," Chem. Abstracts, 91(23):190 abstract # 188121w (XP-002100894) (December 3, 1979).

BQ. Maskos et al., "Interaction of Metal Ions with Nucleic Acids. Interaction of Copper (II) with Pyrimidine Nucleosides and Their Derivatives," Chem. Abstracts, 92(7):218 abstract # 53563s (XP-002100895) (February 18, 1980).

BR. Nielsen et al., "Sequence-Selective Recognition of DNA by Strand Displacement with a Thymine-Substituted Polyamide," Science, 254:1497-1500 (December 6, 1991).

BS. Braun et al., "DNA-Templated Assembly and Electrode Attachment of a Conducting Silver Wire," Nature, 391:775-778 (February 19, 1998).

BT. Aich et al., "M-DNA: A Complex Between Divalent Metal Ions and DNA Which Behaves as a Molecular Wire," J. Mol. Biol., 294:477-485 (1999).

BU. Wang et al., "Electrochemically Induced Release of DNA from Gold Ultramicroelectrodes," Langmuir, 15:6541-6545 (1999).

BV. Porath et al., "Direct Measurement of Electrical Transport Through DNA Molecules," Nature, 403:635-638 (February 10, 2000).

BW. Gelbart et al., "DNA-Inspired Electrostatics," Physics Today, 53:38-44 (September, 2000).

BX. Ratkin et al., "Metallic Conduction Through Engineered DNA: DNA Nanoelectronic Building Blocks," Phys. Rev. Letters, 86: 3670-3673 (April 16, 2001).

It is respectfully requested that the cited information be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

Applicants believe that their invention as claimed is patentable over the above references taken alone or in any combination. However, Applicants reserve the right to demonstrate that their claimed invention was made prior to any one or more of the above-identified references. No inference should be drawn as to the pertinence of the references based on the order in which they are presented.

Applicants respectfully request that the Examiner review the foregoing references to make his own determination of the patentability of the present invention and that the references be made of record in the file of this application.

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PATENT

This Supplemental Information Disclosure Statement is being filed prior to the first Office Action. Although no fee is believed to be due, the Commissioner is hereby authorized to charge any fees necessitated by this transmittal to Townsend and Townsend Deposit Account No. 20-1430.

Respectfully submitted,

Dated: April 16, 2002

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FORM PTO-1449 (Modified)		Attorney Docket No.: 080129-000100US		Application No.: 10/061,979			
LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)		Applicant: Jeremy S. Lee et al.					
		Filing Date: January 31, 2002		Group: Unassigned			
Reference Designation		U.S. PATENT DOCUMENTS		Page 1 of 1			
Examiner Initial		Document No.	Date	Name	Class	Sub-class	Filing Date (If Appropriate)
JM	BJ.	5,532,129	07/02/96	Heller			
JM	BK.	5,589,692	12/31/96	Reed			
<b>FOREIGN PATENT DOCUMENTS</b>							
		Document No.	Date	Country	Class	Sub-class	Translation (Yes/No)
	BL.	WO 95/15971	06/15/95	PCT			
	BM.	WO 96/40712	12/19/96	PCT			
	BN.	WO 97/46568	12/11/97	PCT			
	BO.	WO 99/31115	06/24/99	PCT			
<b>OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)</b>							
	BP.	Bandekar et al., "Copper (II) Nucleic Acid Interactions - a Conformational Study," <u>Chemical Abstracts</u> , 91(23):190 abstract # 188121w (XP-002100894) (December 3, 1979).					
	BQ.	Maskos et al., "Interaction of Metal Ions with Nucleic Acids. Interaction of Copper (II) with Pyrimidine Nucleosides and Their Derivatives," <u>Chemical Abstracts</u> , 92(7):218 abstract # 53563s (XP-002100895) (February 18, 1980).					
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	BS.	Braun et al., "DNA-Templated Assembly and Electrode Attachment of a Conducting Silver Wire," <u>Nature</u> , 391:775-778 (February 19, 1998).					
	BT.	Aich et al., "M-DNA: A Complex Between Divalent Metal Ions and DNA Which Behaves as a Molecular Wire," <u>Journal of Molecular Biology</u> , 294:477-485 (1999).					
	BU.	Wang et al., "Electrochemically Induced Release of DNA from Gold Ultramicroelectrodes," <u>Langmuir</u> , 15:6541-6545 (1999).					
	BV.	Porath et al., "Direct Measurement of Electrical Transport Through DNA Molecules," <u>Nature</u> , 403:635-638 (February 10, 2000).					
	BW.	Gelbart et al., "DNA-Inspired Electrostatics," <u>Physics Today</u> , 53:38-44 (September, 2000).					
	BX.	Ratkin et al., "Metallic Conduction Through Engineered DNA: DNA Nanoelectronic Building Blocks," <u>Physical Review Letters</u> , 86: 3670-3673 (April 16, 2001).					
EXAMINER				DATE CONSIDERED			

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.